```
FILE 'MEDLINE, EMBASE, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 14:10:42
     ON 24 OCT 2002
           1258 S DENATUR? (P) CHAOTROP?
           5106 S DENATUR? (P) DETERGENT?
L2
           1496 S DENATUR? (P) SURFACTANT?
L3
          49281 S DENATUR? (P) ACID?
L4
          23194 S DENATUR? (P) BASE?
L5
             12 S L1 AND L2 AND L3 AND L4
L6
             12 DUP REM L6 (0 DUPLICATES REMOVED)
L7
          20910 S TYRAMINE? OR TYRAMIDE?
L8
             89 S L8 (6P) DENATUR?
L9
             2 S L9 AND L1
L10
              8 S L9 (6P) (?SPECIFIC? BINDING)
L11
              8 DUP REM L11 (0 DUPLICATES REMOVED)
L12
          41092 S ?TYRAMINE? OR ?TYRAMIDE?
L13
           132 S L13 (6P) DENATUR?
L14
             1 S L14 AND L1 AND (?SPECIFIC? BINDING)
L15
L16
             24 S L14 AND (?SPECIFIC? BINDING)
             24 DUP REM L16 (0 DUPLICATES REMOVED)
L17
L18
             53 S DENATUR? (P) SAPONIN
             37 DUP REM L18 (16 DUPLICATES REMOVED)
L19
           4259 S DENATURING AGENT?
L20
          7298 S CHAOTROP?
L21
        166943 S DETERGENT?
L22
        232808 S SURFACTANT?
L23
         29395 S SAPONIN?
L24
            119 S L20 (P) L21
L25
            276 S L20 (P) L22
L26
             73 S L20 (P) L23
L27
             0 S L20 (P) L24
L28
             52 S L25 AND (?SPECIFIC? BINDING)
L29
             1 S L29 AND L26 AND L27
L30
            43 S L26 AND (?SPECIFIC? BINDING)
L31
            16 S L27 AND (?SPECIFIC? BINDING)
L32
            50 DUP REM L29 (2 DUPLICATES REMOVED)
L33
             43 DUP REM L31 (0 DUPLICATES REMOVED)
L34
            16 DUP REM L32 (0 DUPLICATES REMOVED)
L35
          41092 S ?TYRAMIDE? OR ?TYRAMINE?
L36
            213 S L36 (10P) ?SPECIFIC? BINDING
L37
             1 S L37 AND (DENATURING AGENT?)
L38
             5 S L37 AND (CHAOTROP?)
L39
             5 DUP REM L39 (0 DUPLICATES REMOVED)
L40
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(FILE 'HOME' ENTERED AT 11:51:09 ON 24 OCT 2002)

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FILE 'MEDLINE, EMBASE, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 11:51:26
     ON 24 OCT 2002
           1625 S CHAOTROP? (6P) DENATUR?
L1
            162 S L1 (10P) STAIN?
L2
              2 S L2 AND (TYRAMI?)
L3
              1 S L1 (10P) (NONSPECIFIC (3A) STAIN?)
L4
              3 S L1 (10P) (NONSPECIFIC (3A) LABEL?)
L5
              3 DUP REM L5 (0 DUPLICATES REMOVED)
L6
           1625 S (DENATUR?) (6P) (CHAOTROP?)
L7
           6987 S (DENATUR?) (6P) (DETERGENT?)
L8
           3196 S (DENATUR?) (6P) (SURFACTANT?)
L9
          65365 S (DENATUR?) (6P) (ACID?)
L10
          39194 S (DENATUR?) (6P) (BASE?)
L11
             60 S L7 AND L8 AND L9 AND L10 AND L11
L12
             60 DUP REM L12 (0 DUPLICATES REMOVED)
L13
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5902727

ACCESSION NUMBER:

1999:56400 USPATFULL

TITLE:

Method for localization and quantitation of a substance

in a biological sample

INVENTOR(S):

Roth, Kevin A., St. Louis, MO, United States Lorenz, Robinna, St. Louis, MO, United States

PATENT ASSIGNEE(S):

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(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

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19960904 (8)

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Utility

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Granted

PRIMARY EXAMINER:

Wortman, Donna C.

LEGAL REPRESENTATIVE:

Howell & Haferkamp, L.C.

NUMBER OF CLAIMS:

7

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

14 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT:

901

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for localizing and quantitating a target substance in a biological sample is disclosed. The method utilizes an enzyme-linked probe that binds to the target substance and generates a depositable chromogenic or fluorogenic substance which detects position and a soluble chromogenic or fluorogenic substance which allows quantitation in the medium bathing the sample.

DETD . . . for signal amplification is described in U.S. Pat. No. 5,196,306 and the corresponding commercial kit form known as the biotin tyramide signal amplification (TSA, New England Nuclear Life Science Products, Boston, Mass.) method. The method utilizes an enzyme-linked antibody that binds. . .

DETD . . . can be terminated by removal of the solution phase from the enzyme or by addition of acids, bases, reducing agents, chaotropic agents or the like to a sample of the solution phase first removed from the enzyme. A chromogenic or fluorgenic. . .

DETD . . . boiling. In addition, surface sites unrelated to the target substance can sometimes also bind the probe nonspecifically. To reduce this nonspecific binding, the sample can be coated with a solution which contains a reagent which binds to and masks or generally blocks such nonspecific binding sites.

Some such masking or blocking agents include gelatin, bovine serum albumin, powdered milk and some detergents.